Examining the quality of work life: empirical testing indicators in the public organisation

Mohammad Reza Zahedi¹, Seyyed Asghar Jafari², Majid Ramezan³

Faculty of Management and Industrial Engineering, Malek Ashtar University of Technology, Tehran, Iran^{1,3}

Department of Law and International Relations, Malek Ashtar University of Technology, Tehran, Iran²

zahedy182@gmail.com^{1*}, jafari1647@yahoo.com², m_ramezan83@yahoo.com³



Article History

Received on 28 December 2020 1st Revision on 12 March 2021 2nd Revision on 18 March 2021 3rd Revision on 8 May 2021 4th Revision on 21 May 2021 Accepted on 27 May 2021

Abstract

Purpose: The present study aimed to identify employees' quality of work life indicators in public organisations and provide necessary context to improve system accountability and employees' needs in organisations.

Research methodology: To identify quality of work life indicators, authors studied theoretical research basics entirely and by considering elites' ideas, identified main indicators by a descriptive – survey technique.

Result: Based on research findings, 15 constituents were identified as work life quality indicators. Research results indicate undesired quality of work life among employees at public organisations. Of identified constituents, Safe and healthy working conditions and organisational conflict are the most important and job satisfaction and Pay/benefits are the lowest important factors.

Limitations: The results only extend the understanding of the role of quality of work life in organisational effectiveness and have implications for human resource managers that may not be applicable for other positions.

Contribution: The study results help organisations identify the elements that affect the QWL and help them plan to increase organisational effectiveness by increasing employee satisfaction and motivation.

Keywords: Quality of work life, Indicators of QWL, Public organisations

How to cite: Zahedi, M. R., Jafari, S. A., & Ramezan, M. (2021). Examining quality of work life: empirical testing indicators in public organisation. *Annals of Human Resource Management Research*, 2(1), 99-111.

1. Introduction

Every organisation seeks to maintain its valuable assets in order to increase its productivity. Money and equipment may have been considered important at first, but gradually it has become clear that the most valuable of these are the employees of organisations (Stewart, 2010). In this regard, the QWL of employees has played an important role in increasing productivity in organisations. The results of the latest study published by the National Productivity Organization show that in recent years, employee productivity in a number of industries has faced a recession and a negative growth rate. Researchers have found that companies with better employee quality of life have successfully retained their valuable employees and have higher profitability (Anitha, 2014). In a general definition, the quality of work life can be considered the reaction of people to work, especially in satisfaction and mental health, which shape the mental perception of employees' perception of it (Alserhan, Al-Adamat, & Al-Adamat, 2021). Ouality of work life has two aspects:

1. Objective aspect; Which refers to a set of real working conditions in an organisation, such as salaries and benefits (Gupta, 2015).

2. Internal aspect; These are people's perceptions of quality of life, in particular the eight variables of adequate pay, safe and healthy working conditions, opportunities for talent development, opportunities for security and continuous growth in the future, social cohesion in the organisation, individual rights in the organisation, work and The whole living space introduces social dependence as a goal to improve the QWL; Grote & Guest (2016) in completing it in the dimension of individual action They added individual activity and flexible work (Dönmez, Grote, & Brusoni, 2016).

According to <u>Uysal and Sirgy</u>, (2019), the Theory of Needs and Theory of Overflow Seven Factors of Satisfaction of Needs: Health; Economy and security; Social; Honor; Prosperity; knowledge; Elegance of nature and creativity have been introduced as indicators of working life; Safety; Job security and staff growth and excellence; Productivity is shown (<u>Marri, Sadozai, Zaman, & Ramay, 2012; Uysal & Sirgy, 2019</u>). Also, <u>Sirgi et al. (2001)</u> explicitly and implicitly explain the factors in their relatively comprehensive model on the important role of factors such as organisational justice, work-family conflict, safety conditions, job security, effective relationships, employee participation, and social responsibility of the organisation. Effective training and job independence have significantly emphasised that research related to these factors (<u>Sirgi, 2001</u>). Organisational justice, work-family conflict, Safety conditions, job security, effective relationships, employee participation, organisational social responsibility, effective training, and job independence have emphasised significance (<u>Jeon, 2009</u>).

Since there is no doubt that the trustees of organisations are human resources, they must be both motivated and properly motivated to deliver the desired behaviour in order to produce the desired phenomenon, as Rogers stated (Rogers, Corley, & Ashforth, 2017). One of the most interesting ways to motivate is to pay attention to QWL programs. Given the culture of each society is based on the philosophy of life of that society; therefore, the quality of work life in each society and subcultures in that society is also different, which can affect the organisational culture in the work environment of different regions (Friedman, Jack, Rochford, & Boyatzis, 2015; M. Zahedi, Akhavan, & Naghdi Khanachah, 2020). This is despite the fact that the development of Barmi models in our society to identify the QWL and its dimensions has received less attention since these non-indigenous models are not necessarily based on the work culture of Iranian organisations and also often based on Quantitative methods have been measured, for example, domestic research mentioned in the field of backgrounds, so it can be said that most domestic research has only identified components of quality of work life based on non-native patterns. Also, the problem with quantitative measurements is that they are too mechanical and inflexible, neglecting to examine the impact indicators considered by the participants in the research sample, and only measuring the indicators that are assumed by the researchers (Agus & Selvaraj, 2020; M. R. Zahedi & Khanachah, 2020). This not only causes a kind of incomplete identification of the components but may also have a biased effect on participants' responses (Agus & Selvaraj, 2020).

Organisations and companies that are interested in improving the QWL try to create a sense of security, pride, autonomy and responsibility in employees and know that they are treated equally; The workplace is like their home; They are expected to work on their own and be flexible in performing their duties when necessary(Allam & Shaik, 2020). The managers of these organisations try to treat the employees under their supervision with justice and fairness; Keep communication channels open at all levels of the organisation; Create opportunities for employees; Involve them in decision-making and empower them to live up to their commitments (Rupp, Shapiro, Folger, Skarlicki, & Shao, 2017). QWL is very important and necessary for attracting and retaining employees in organisations. Factors such as adequate and fair pay, healthy working conditions are among the factors that improve the QWL of employees (Miao, Bozionelos, Zhou, & Newman, 2020).

Quality of work life programs contain group forms of work, characteristics affecting workplace satisfaction and employee productivity such as reward system, workflow, managerial styles and physical work environment (Gilaninia, 2017; M. Zahedi et al., 2020). Quality of work life programs pay special attention to workgroups and job enrichment. Lutans (2002) notes that initially, the field of

organisational behaviour focused only on enrichment approaches to job design. However, now the quality of the work-life approach is an important social issue worldwide for job design. Liz and Kerns believe that improving the QWL is essential for organisations (Inda, 2013; Luthans, 2002). They believe that a high quality of life maintains the retention of employees in the organisation. Indicators of quality of work life from their perspective are: commitment to the organisation, support for management of employees, support for colleagues, the atmosphere of trust, understanding of the leader, mutual respect, recognition and assertiveness, intangible rewards, material rewards and relationship between categories (Lockwood, 2007). Quality of work life programs is one of the factors of planned change (Budhwar & Bhatnagar, 2007; M. R. Zahedi & Khanachah, 2019).

2. Literature review

2.1. Quality of Work Life (QWL)

The philosophy of quality of work life refers to a set of general principles that make employees the most important source of the organisation and trustworthy, responsible and worthy of valuable assistance, employees who should be treated with dignity and respect. Quality of work life includes opportunities for active participation in teamwork or problem solving that can be beneficial to both employees and employers. The term quality of work life is like an umbrella that has many meanings. Some researchers believe that the work environment can meet the personal needs of individuals and positive interactions help. They emphasise that if rewards from the organisation accompany the personal needs of individuals, it is satisfactory and factors such as promotion and rewards meet their expectations. Simultaneously with this view, another researcher defines the quality of work life according to job characteristics and working conditions. He considers the central dimensions of entering the quality of work life to be the improvement, well-being and productivity of employees. In this regard, one researcher acknowledges that quality of work life has a multidimensional structure and is associated with job satisfaction and conflict, motivation, productivity, health, security and well-being, job security and competency development. Quality of work life can be defined both mentally and objectively. Initial definitions of quality of work life imply a mental concept. The mental definition of quality of work life is the perception and attitude of employees about the quality of work life, which has a separate and distinct meaning according to the culture and attitude of employees in different countries (Kalliola & Mahlakaarto, 2020; Meister & Willyerd, 2021).

One of the factors that strongly affects the efficiency and productivity of employees in the organisation is Quality of work life. Frustration, anger of employees and dissatisfaction with the work environment create high costs for the individual and the organisation (Lambert, Hogan, & Griffin, 2007). Companies that do not care about measuring and increasing satisfaction face reduced productivity, inability to attract and retain quality and talented employees, which results in nothing but increased costs and reduced final profit margins of the company. Therefore, managers seek to identify these factors at all levels of the organisation (Van der Berg & Martins, 2013).

Today, in contemporary management, the concept of quality of work life has become a major social issue around the world. Whereas in the past decades, only working life has been looking for new systems to help employees balance their work and personal lives (Forssell, 2020). The quality of the work life program includes any improvement in the organisational culture that promotes the organisation's growth and excellence. Hence, the system considers the quality of work life of investing in individuals as the most important variable in the strategic management equation. Findings show that the components of these programs have reduced the number of employee complaints, reduced absenteeism, reduced disciplinary measures, increased positive attitudes of employees and increased their participation in the programs of the suggestion system. On the other hand, meeting the needs of employees will also lead to improvement and the long-term efficiency of the organisation (Monroe, Morse, & Price, 2020). Today, most empirical research on the quality of work life has implicitly accepted a new perspective on job satisfaction and career-related concepts.

Although quality of work life and job satisfaction are considered synonymous concepts in some texts, many management experts and industrial psychologists believe that quality of work life and job satisfaction are different in terms of concept (Mukhopadhyay, 2020; Taylor et al., 2020). An objective

definition of quality of work life is a set of activities and actions that are performed in real working conditions in an organisation to improve the quality of work, such as employee participation in decisions, restraint, salary, a healthy work environment, job security, health, communication, career path development, job enrichment, etc. In this context, the quality of work life indicates the benefits of the work environment in terms of productivity and employee satisfaction. Most of these definitions emphasise the promotion of health, well-being, job security, job satisfaction, competency development and balance between working and non-working life, and also provide a good understanding of the interaction concept between people and their work environment (Villotti, Corbière, & Guay, 2020; M. R. Zahedi & Naghdi Khanachah, 2020).

2.2. Conditions

The quality of work life is crystallised in the employees' reaction to their job satisfaction and mental health (De Jong, Tamminga, de Boer, & Frings-Dresen, 2016). Attitude to defining the quality of work life and its personal reflections, work experience and how to improve work in order to meet the needs of the individual has a special priority. In the category of characteristics of quality of work life and in its compliance with the individual reactions of employees, the following basic points are worth mentioning: 1- Adequate and appropriate payment: Considering other compensatory payments, how much payment and benefits are sufficient to maintain an acceptable standard of working life, especially compared to other jobs? 2- Safe and healthy environment: What is the physical and mental environment of work? Are working conditions unfairly dangerous? What mental and physical conditions affect employees' health, comfort, and corruption while doing their job? 3- Development of human capacities: How simple and detailed are the tasks and how strict are the controls? To what extent does work enable employees to improve their skills and knowledge, use them and do something that is meaningful and important to them? 4- Growth and security: To what extent is performing the assigned tasks effective in maintaining the growth of people's capacity? How can new knowledge and skills be acquired to perform tasks that are later delegated to employees? What are the possibilities for increasing efficiency and productivity in the direction and for the progress of the person in the relevant organisational path and recognising him / her due to the structural complexity and focus of his / her partners and other members? In another definition of quality of work, This is "the ability of employees to meet their important personal needs using the experience they have gained during their service in the organisation." In this definition, there is always an emphasis on creating an environment that leads to meeting the needs of individuals. The issue of improving living conditions in the 1970s (1970-1970), when inflation and recession were on the rise, received special attention. This attention was somewhat surprising because usually in economic conditions and increasing resources, the organisation's top management thinks of increasing productivity in the direction of popular programs within the organisation, not the conditions of recession and inflation.

2.3. Quality

It guarantees the quality of work life, which in many cases ranges from paid change to the enactment of the Employees' Rights Act, freedom of thought, freedom of expression, the process of meeting needs, and fair and equal treatment. the quality of work life can be defined in the following two ways: The objective definition of quality of work life is a set of real working conditions in an organisation such as salaries and benefits, welfare, health and safety, participation in decision-making, democracy, supervision, diversity and richness of jobs, etc. A mental definition of quality of work life is a person's perception and perception of quality of work life in particular. In other words, the quality of work life for each individual or group of people with their culture and attitude reflects a specific concept. In a general definition, it can be said that the quality of work life means the mental perception and perception of employees of an organisation of the physical and psychological desirability of their work environment. Naturally, according to the definition provided in each society or each country, especially different regions in Iran have different subcultures with different mental perceptions about life and work, measuring the quality of work life will be different. Walton (1980) divides the main components of the OWL into four parts. According to him, the factors affecting the quality of work life are: meaningful work; Organisational and social proportion of work; Challenging, rich and productive work; It has also been discussed in more detail: fair and sufficient payment; Safe and hygienic working conditions; A good opportunity to develop human capabilities; A good opportunity for continued

growth and security; The importance of work in society; Labor law; Social fit of work. The culture of any society is based on the philosophy of life of that society. Therefore, just as quality of life and quality of work life have a specific definition for each society, the relationship between quality of work life is different according to the philosophy of life of each society. The same is true for organisations. In addition, the quality of work life at the level of the organisation has been shown to increase the performance and productivity of human resources significantly and thus the organisation's effectiveness. In another definition, QWL means "having the right supervision, good working conditions, good pay and benefits, and most importantly, creating a challenging, participatory, and persuasive work environment." High quality work life is achieved through attention to the philosophy of employee relations and is the use of efforts to use quality work life, which are regular efforts by an organisation that gives employees greater opportunities to influence their work and work together and organise overall effectiveness.

Table 1. Review of QWL definitions used in industry and commerce

References	Definition				
(Agus & Selvaraj, 2020)	With the help of QWL processes, the organisation can respond to the needs of employees in creating a mechanism to allow them to fully participate in the decisions that design their lives in the workplace.				
(Allam & Shaik, 2020)	Employees sometimes use QWL to mean that they are the only source of livelihood and financial needs of the organisation. If they can not meet their economic needs through the organisation and the job position in the organisation, they usually do other things besides their main job role. However, most of these employees do not have the necessary loyalty to the organisation.				
(Badir, Frank, & Bogers, 2019)	QWL does not include various aspects such as good working conditions, job security, safe and fair mode of work and creating a suitable job opportunity.				
(Gilaninia, 2017)	QWL is a process aimed at influencing people's creativity under it to improve the work and process in the organisation.				
(Dönmez et al., 2016)	QWL has multiple applications in management aspects such as paying attention to a group of organisational management approaches and evaluating employees' emotional variables at different times.				
(De Jong et al., 2016)	QWL defines the type of business relationship between employees and the organisation environment.				
(Friedman et al., 2015)	QWL is instrumental and goal-oriented in nature, and this goal-oriented mode itself is independent in nature. This characteristic creates the basis for earning points, competencies, and civic skills for employees.				
(Gupta, 2015)	QWL, the type of attitude of people towards their job, the extent to which mutual trust, attention, appreciation, interesting work and suitable opportunities for investment (material and spiritual) in the workplace have been provided by managers for employees. The degree of quality of work life within the organisation is estimated by measuring the level of satisfaction, low absenteeism and high motivation in employees.				
(Inda, 2013)	QWL creates a structure in the organisation through which members of the organisation can influence their work tasks and work environment through their decisions. Their decisions in this way can increase their participation and productivity and reduce their unfavorable work pressures and work stress.				
(Jeon, 2009)	QWL is a kind of thinking and solution to solve the intellectual concern of employees about the welfare and effectiveness of the organisation.				

Extensive studies on the norms in the field of quality of work life indicate that the concept of quality of work life has a multidimensional structure and its factors are interrelated in a chain; this causes the phenomena of conceptualisation and measurement with Higher accuracy and intensity should be considered. It is also associated with motivation, job participation, job satisfaction, employee health, productivity, job security, competency growth, and work-life balance. (Alserhan et al., 2021; Ghorbani & Khanachah, 2020).

2.4. Benefits of QWL

The profitability of companies and businesses is directly related to the satisfaction of their workforce. Companies that do not care about measuring and increasing employee satisfaction face increasing losses, reduced productivity, and an inability to attract and retain a quality workforce. Employee satisfaction and quality of work life also directly impact the quality of customer service(Gupta, 2015). Measures to measure the quality of work life help to allocate resources effectively and efficiently to increase productivity and stability in the workplace and have the following results: Positive attitude of employees towards their work and the company in which they work Increase productivity and intrinsic motivation Strengthen the effectiveness of the organisation and its competitive advantage Basic factors affecting the quality of work life Ouality of work life is based on three important factors: Occupational care: The most essential element for enjoying work is a safe work environment(Stewart, 2010). Occupation and work environment should not endanger health. Appropriate working hours: Organisations should consider working hours, overtime, vacation time and leave. Adequate pay: Employers should not pay their employees less than the minimum government-approved wage rate. Job is a role that people take on (Rogers et al., 2017); On the one hand, it helps provide life, and on the other hand, self-realisation creates pleasure and satisfaction in the person. QWL means balance between duties and job requirements and its attractiveness and pressures, an old and ever-changing concept in the field of corporate social responsibility (Taylor et al., 2020). Some companies, although they care about this issue, do not consider it in their business strategy and plan (Miao et al., 2020).

2.5. The nature and scope of QWL

The quality of relationships between employees and the quality of the work environment shape the quality of work life. The best work environment is one where you can trust your co-workers, be proud of your work, and enjoy the company of the people around you. (Kalliola & Mahlakaarto, 2020) QWL deals with the human dimensions of job, job satisfaction and organisational development. The following factors help improve the quality of work life:

- 1. Recognise the issues and problems of working life problems identified by the department or people in charge. Issues such as why employees are unhappy and low morale, the need for training and many other issues need to be addressed. By accurately identifying these issues, it is possible to create a "human-centered organisation."
- 2. Commitment to progress Employees' commitment to boosting performance and increasing productivity improves the quality of work life. This can be addressed in the form of staff encouragement and support programs. To strengthen the existing system, reports on the quality of work life should be provided on an ongoing basis. Introducing a reward structure may also be helpful.
- 3. Quality of work life review team should be a mix of managers and staff and take into account all current issues such as low morale, mistrust, increased workload, rewards, encouragement and so on.
- 4. Education Both leaders and employees have the ability to assess the conditions and characteristics needed for the job and decide on training needs to improve the quality of work life.
- 5. Use of focus groups can impact the quality of work life by effectively discussing the following: Why are you here today? What do you think are the three most important factors that affect the quality of your working life? What do you expect the company to do for you? Do you expect a salary increase?
- 6. Evaluate the information obtained from the focus groups After discussing the issues and issues we have mentioned, the collected information should be evaluated in order to be able to rely on them to determine the direction and actions of the organisation.
- 7. Identify and implement development opportunities Identifying opportunities such as communication, encouragement, and intangible rewards is an important step. Helps strengthen support structures, continuously monitor the reward and incentive system, and define communication strategies aimed at establishing a relationship between managers and employees.
- 8. Flexible working hours today's diverse workforce does not happily show flexible working hours. They want flexibility in scheduling work so that they can manage their work and professional lives at the same time. Flexibility can be created in the following ways: Work more during the day versus reducing working days per week Attending work at certain hours but at different times of the day instead of the usual working hours Possibility to work at home 9. Independence in the workplace Assignment of responsibility is an essential element in the organisational structure. People tend to be free to form working groups and make some decisions. In organisations with a high QWL, a good work environment

ensures direct communication, respect, encouragement, trust, support, welfare and professional and personal satisfaction of employees, and as a result, the quality of all work is increased (Marri et al., 2012).

3. Research methodology

In terms of aim, this is an applied research and it is a descriptive survey in terms of data collection method. The population includes all employees of Qom public organisations where 29,000 people are working. By using stratified sampling method, the needed sample for this research was determined as 264 people. Since the authors considered the possibility of failure in gathering some questionnaires, they added 30% to the sample volume; finally, 312 evaluable and analysable questionnaires were gathered.

In the present study, questionnaires are used to collect data. In the first step, the authors identified different indicators of employees' quality of work life by considering various models in quality of work life as well as cultural differences and dominating conditions on public organisations. To draw a clear picture of "quality of work life" of employees in public organisations, scientific variables were initially studied in Persian and English resources and then some indicators were extracted. Then, identified variables were submitted to elites to study and comment on them. After gathering elites' opinions and posing their proposed changes, extracted indicators were re-submitted to elites. In the final step, 15 variables were agreed including Team communications, Safe and healthy working conditions, job stress, organisational trust, Organisational participation, job security, organisational conflict, job satisfaction, supervisor support, Co – worker support, role clarity, decision making authority, Pay/benefits and Adaptability of individual and job. After identifying these variables, a 50-item questionnaire with Likert 5 – scale range was devised. To measure the validity of the questionnaire, it was delivered to some elites and its validity was confirmed. To evaluate its reliability, SPSS software and Cronbach's alpha ratio were used. The achieved Cronbach's alpha ratio was 93%. Therefore, the reliability of the questionnaire was confirmed since its Cronbach's alpha is greater than 70%.

SPSS software was used to analyse data and achieving the results from collected data. In the meantime, the Exploratory Factor Analysis test was utilised to identify quality of work life indicators, Kolgoromov – Smirnov test was used to study the normality of research variables, T-Test was used to study the status of quality of work life and finally Friedman test was applied to rank quality of work life factors.

4. Research Findings

4.1. Descriptive statistics

Findings of descriptive statistics show that 86.22% of respondents were male and 11.86% were female. More respondents had bachelor's and higher degrees (about 65%) and only 20% of the respondents had diploma and lesser degrees. In terms of organisational level, most respondents were experts (51%) and 32% were employees. Only 14% of respondents were managers.

4.2. Identifying QWL indicators

To identify quality of work life indicators, Exploratory Factor Analysis was used. In factor analysis, it should be confirmed that one can use current data to analyse. Put it differently, is the quantity of data sufficient for factor analysis? To this end, KMO index and Bartlett test were used. If KMO rate is greater than 7% and the significance level of Bartlett test is less than 0.05, then one can say that the sample volume is proper for factor analysis.

Table 2. The results of KMO and Bartlett tests in exploratory factor analysis

(KM	0.877	
Bartlett test	Chi-square Df sig	4.756 E3 1225 0.000

As seen in table 2, KMO rate is 0.877, which is greater than 0.7 and the significance level of Bartlett is less than 0.05, so one can say that the sample volume for this factor analysis test is sufficient. Therefore, factor analysis based on a correlation matrix is fully justifiable in the studied sample group.

In the table on initial intersection and extractive intersection, a greater extractive intersection rate (greater than 0.5) show the variables better and if the rates of extractive intersection are very low, it may be necessary to extract another factor. The results from explorative factor analysis indicate that all figures in the extractive intersection column are greater than 0.5 so no item is deleted from the questionnaire.

By using the method to analyse main variables and varimax spin, 50 items were summarised into 15 factors. The results (table 3) indicate that these 15 factors determine 68.782% of total variances and more variance percentage, better performance of factor analysis in justifying the variables.

Table 3. The special value of factors and variances after spinning

Table 3. The special value of factors and variances after spinning									
Factor	Factor	Special	Varian	Pooled	Factor	Spe	Varianc	Pooled	Factor
	name	value	ce	varianc		cial	e	variance	name
				e		valu			
						e			
Factor	safe and	4.724	6.449	6.449	Factor 9	4.51	2.255	48.863	supervisor
1	healthy					1			support
Factor	co –	4.214	6.428	12.877	Factor	4.47	2.235	53.333	organization
2	worker				10	0			al trust
	support.								
Factor	organizatio	3.192	5.699	18.576	Factor	3.34	2.171	56.575	adaptability
3	nal conflict				11	2			of individual
									and job
Factor	role clarity	2.849	5.544	24.12	Factor	3.21	2.108	59.89	organization
4	•				12	5			al
									participation
Factor	Job stress	2.772	5.390	29.51	Factor	3.04	2.024	62.939	Team
5					13	9			communicati
									on
Factor	decision	2.628	5.256	34.766	Factor	2.95	1.977	65.893	job
6	making				14	4			satisfaction
	authority								
Factor	organizatio	2.486	4.972	39.738	Factor	2.88	1.944	68.782	wage/salary
7	nal				15	9			payment
	commitme								1 4
	nt								
Factor	job	2.307	4.614	44.352					
8	security								

4.3. Evaluating employees' QWL and its various variables

The normality of data distribution was initially measured by Kolmogrov – Smirnov test to evaluate quality of work life and its variables. Since the significance level of all research variables was greater than the determined significance level (0.05), one can say that all research variables are normal. So, one sample T-Test is used to study the status of these variables.

$$\begin{cases} H_0: \mu \ge 3 \\ H_1: \mu < 3 \end{cases}$$

Since SPSS software uses a two-sides average test, its error level is considered 10% to consider 5% level on both sides of the chart below. Finally, a 5% error level is computed for a one-side test.

Table 4. One-Sample Test of QWL

	N	Mean	Std. Deviation	T	df	T_{α}	result
Team	312	2.2858	0.60045	-20.42682	311	-1.960	undesirable
communication							
Safe and healthy	312	2.9747	0.65663	-0.66163	311	-1.960	desirable
working conditions							
Job stress	312	2.7143	0.64351	-7.62246	311	-1.960	undesirable
Organizational	312	0.2318	0.70770	-18.76741	311	-1.960	undesirable
trust							
Organizational	312	2.6666	0.66673	-8.52843	311	-1.960	undesirable
commitment							
Organizational	312	2.3354	0.74186	-15.53892	311	-1.960	undesirable
participation							
Job security	312	2.3293	0.64527	-17.7464	311	-1.960	undesirable
Organizational	312	2.8627	0.83240	-2.82586	311	-1.960	undesirable
conflict							
Job satisfaction	312	2.1831	0.57867	-23.86976	311	-1.960	undesirable
Supervisor support	312	2.7168	0.60605	-8.02151	311	-1.960	undesirable
Co – worker	312	2.5302	0.69295	-11.52337	311	-1.960	undesirable
support							
Role clarity	312	2.6443	0.63617	-9.61625	311	-1.960	undesirable
Decision making	312	2.5402	0.69997	-11.33793	311	-1.960	undesirable
authority							
Pay/benefits	312	2.0684	0.68966	-23.08040	311	-1.960	undesirable
Adaptability of	312	205397	0.5271	-14.91018	311	-1.960	undesirable
individual and job							

Since T is less than the significance level if the one-side test (Ta) for all quality of work life variables except health and safe workplace, H_0 is rejected and one can say that the status of these variables is undesired, concerning safe and healthy working conditions, since T is greater than one-side test (Ta), H_0 is supported. One can say that the status of this variable is medium. In an overall conclusion, one can say that quality of work life is not desired in Qom public organisations.

4.4. Ranking the variables of QWL

Friedman test is used to rank the variables of QWL. The results are shown in tables 9 and 10.

H₀: there is no significant difference among status quo of QWL variables.

H₁: there is a significant difference among status quo of QWL variables.

Table 5. Friedman test significance of Quality of Work Life variables

Statistical indicators	Computed sums
N	312
Chi-Square	561.040
df	14.00
Sig	0.000

The testing results show that obtained significance level is less than 0.05 so H_0 is refused and H_1 is supported. Therefore, one can say that there is a significant difference between in status quo of QWL variables. Relevant variables are outlined in table 8.

Table 6. Ranks of QWL variables

The variables of Quality of work	Mean Rank	Variables priority
Safe and healthy working conditions	11.26	1
Organisational conflict	10.74	2
Supervisor support	9.76	3

Organisational commitment	9.39	4
Job stress	9.35	5
Role clarity	8.86	6
Co – worker support	8.19	7
Decision making authority	8.02	8
Adaptability of individual and job	7.85	9
Job security	6.87	10
Organisational participation	6.74	11
Team communication	6.38	12
Organisational trust	5.79	13
Job satisfaction	5.52	14
Pay and benefits	5.28	15

According to <u>Friedman's</u> analysis, "Safe and healthy working conditions" are higher than other variables followed by "organisational conflict." For the same reason, organisations must pay attention to these variables as key indicators of quality of work life.

5. Conclusion and discussion

Efficient human resources are the most important capital for any organisation. Mostly, all connoisseurs believe that human resource is the most fundamental resource for all organisations. It should be grown as the main capital of society and should be motivated by utilising proper policies. Proper usage of human resources relies upon initiatives to protect the material and spiritual aspects of organisational staff. Such initiatives which include amenities and treatment services, incentive plans, job relevance, job security, job design (job enrichment and development), the importance of individual's role and position in organisation, paving the ground for employees; growth and progress, employees' training and so on are under the name of working life quality. In today's society, improving QWL is one of the important purposes of organisation and people. Since there is a direct relation between HR management and QWL trends, reviving employees through their quality of work life is success key of any organisation.

The present study is conducted to identify and evaluate quality of work life indicators among public organisation employees. Based on research findings, 15 variables are identified as the indicators of working life quality, including team communications, Safe and healthy working conditions, job stress, organisational trust, organisational commitment, Organisational participation, job security, organisational conflict, job satisfaction, supervisor support, Co – worker support, role clarity, decision making authority, Pay/benefits and Adaptability of individual and job. Research results indicate the undesired quality of work life among employees at public organisations. Of identified constituents, Safe and healthy working conditions and organisational conflict are the most important and job satisfaction and Pay/benefits are the lowest important variables. These findings and identified variables are similar to the results of previous researches. Findings by Robbins (1989) show that quality of work life means a proper workplace for staff. In other words, one can improve productivity in organisations through freedom and independence, confirmation, belonging, progress, development and internal incentives. To this end, Watson et al. (2003) proposes that one can improve quality of work life by controlling work velocity, permitting the selection of working methods by employees and integrating monitoring and controlling in redesigning the job. The importance of such proposals is confirmed in different studies like Walton (1980). Arif and Ilyas (2013) identified job security and safety, growth chance, working leisure, physical facilities and job influence as quality of work life variables. Fontinha et al. (2019) considered such factors as health and welfare, job security, job satisfaction, balance between working and non-working life as quality of work life variable among IT specialists in Malaysia. Walter (2017) introduced fair and enough payment, health and safe workplace, growth chance, life overall climate, law orientation in organisation, social dependency to working life, social integration and promoting human capabilities as the main quality of work life factors in training groups at universities.

To better utilise human resources, it is necessary to respect their quality of work life. High quality of work life leads to employees' productivity along with positive organisational results. Additionally, we need to respect employees' quality of work life in order to execute modern organisational concepts since many concepts of such theories (employees' contribution, leadership behaviour, and employees' empowerment) are all among quality of work life plans. Therefore, one can say that today organisations need to pay attention to their employees' quality of work life for their endurance and effective survival in today hyper-competition world and this aim can be achieved through executing multi-year quality of work life plans and putting such plans in the fixed organisational policies and trends. Concerning quality of work life advantages, one should provide employees with organisational conditions and environments by which they are motivated and this can improve their quality of work life and their performance improvement.

References

- Agus, A., & Selvaraj, R. (2020). The mediating role of employee commitment in the relationship between quality of work life and the intention to stay. *Employee Relations: The International Journal*.
- Allam, Z., & Shaik, A. (2020). A study on quality of work life amongst employees working in the Kingdom of Saudi Arabia. *Management Science Letters*, 10(6), 1287-1294.
- Alserhan, H., Al-Adamat, A., & Al-Adamat, O. (2021). The mediating effect of employee happiness on the relationship between quality of work-life and employee intention to quit: A study on fast-food restaurants in Jordan. *Management Science Letters*, 11(3), 933-938.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International journal of productivity and performance management*.
- Arif, S., & Ilyas, M. (2013). *Quality of work-life model for teachers of private universities in Pakistan*. Quality Assurance in Education.
- Badir, Y. F., Frank, B., & Bogers, M. (2019). Employee-level open innovation in emerging markets: linking internal, external, and managerial resources. *Journal of the Academy of Marketing Science*, 1-23.
- Budhwar, P. S., & Bhatnagar, J. (2007). Talent management strategy of employee engagement in Indian ITES employees: key to retention. *Employee relations*.
- De Jong, M., Tamminga, S. J., de Boer, A. G., & Frings-Dresen, M. H. (2016). Quality of work life of cancer survivors: development of a cancer-specific questionnaire. *Journal of Cancer Survivorship*, 10(2), 394-405.
- Dönmez, D., Grote, G., & Brusoni, S. (2016). Routine interdependencies as a source of stability and flexibility. A study of agile software development teams. *Information and Organization*, 26(3), 63-83.
- Fontinha, R., Easton, S., & Van Laar, D. (2019). Overtime and quality of working life in academics and nonacademics: The role of perceived work-life balance. *International Journal of Stress Management*, 26(2), 173.
- Forssell, R. C. (2020). Gender and organisational position: predicting victimisation of cyberbullying behaviour in working life. *The International Journal of Human Resource Management*, 31(16), 2045-2064.
- Friedman, J., Jack, A. I., Rochford, K., & Boyatzis, R. (2015). Antagonistic neural networks underlying organisational behaviour. In *Organisational neuroscience*: Emerald Group Publishing Limited.
- Ghorbani, S., & Khanachah, S. N. (2020). Providing a framework for knowledge sharing in knowledge-based organisations according to social capital indicators. *Annals of Management and Organization Research*, 1(4), 271-284.
- Gilaninia, S. (2017). A conceptual model: The chain of quality of work life. *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 6(5), 44.
- Gupta, B. (2015). An empirical study of impact of demographic variables on quality of work life among insurance sector employees in indore division. *Pacific Business Review International*, 8(1), 24-32.
- Inda, S. S. (2013). Quality of work life: Canadian Academic Publishing.
- Jeon, J.-H. (2009). The impact of organisational justice and job security on organisational commitment exploring the mediating effect of trust in top management.

- Kalliola, S., & Mahlakaarto, S. (2020). Methods of promoting professional agency at work. *Challenges*, 11(2), 30.
- Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction, and organisational commitment. *Journal of Criminal Justice*, 35(6), 644-656.
- Lockwood, N. R. (2007). Leveraging employee engagement for competitive advantage. *Society for Human Resource Management Research Quarterly, 1*(1), 1-12
- Luthans, F. (2002). The need for and meaning of positive organisational behaviour. *Journal of Organizational Behaviour: The International Journal of Industrial, Occupational and Organisational Psychology and Behaviour*, 23(6), 695-706.
- Marri, M. Y. K., Sadozai, A. M., Zaman, H. M. F., & Ramay, M. I. (2012). The impact of Islamic work ethics on job satisfaction and organisational commitment: a study of agriculture sector of Pakistan. *International Journal of Business and Behavioural Sciences*, 2(12), 32-45.
- Meister, J. C., & Willyerd, K. (2021). *The 2020 workplace: How innovative companies attract, develop, and keep tomorrow's employees today:* HarperCollins Publishers Inc.
- Miao, R., Bozionelos, N., Zhou, W., & Newman, A. (2020). High-performance work systems and key employee attitudes: the roles of psychological capital and an interactional justice climate. *The International Journal of Human Resource Management*, 1-35.
- Monroe, M., Morse, E., & Price, J. M. (2020). The relationship between critical care work environment and professional quality of life. *American Journal of Critical Care*, 29(2), 145-149.
- Mukhopadhyay, M. (2020). *Total quality management in education*: SAGE Publications Pvt. Limited. Robbins, S. (1989). Organisational Behaviour: Concepts, Controversies and Applications. Englewood Cliffs, New Jersey, Prentice Hall
- Rogers, K. M., Corley, K. G., & Ashforth, B. E. (2017). Seeing more than orange: Organisational respect and positive identity transformation in a prison context. *Administrative Science Quarterly*, 62(2), 219-269.
- Rupp, D. E., Shapiro, D. L., Folger, R., Skarlicki, D. P., & Shao, R. (2017). A critical analysis of the conceptualisation and measurement of organisational justice: Is it time for reassessment? *Academy of Management Annals*, 11(2), 919-959.
- Sirgi, G. (2001). Il bacino di Castrola, 1910-2001: un'opera tenacemente voluta dalla popolazione locale e contrastata da chi ne beneficierebbe: Gruppo di studi alta Valle del Reno.
- Stewart, T. A. (2010). *Intellectual Capital: The new wealth of organisation*: Currency.
- Taylor, M. P., Boxall, P., Chen, J. J., Xu, X., Liew, A., & Adeniji, A. (2020). Operator 4.0 or Maker 1.0? Exploring the implications of Industrie 4.0 for innovation, safety and quality of work in small economies and enterprises. *Computers & industrial engineering*, 139, 105486.
- Uysal, M., & Sirgy, M. J. (2019). Quality-of-life indicators as performance measures. *Annals of Tourism Research*, 76, 291-300.
- Van der Berg, Y., & Martins, N. (2013). The relationship between organisational trust and quality of work life. SA Journal of Human Resource Management, 11(1), 1-13.
- Villotti, P., Corbière, M., & Guay, S. (2020). Posttraumatic stress disorder and quality of life in victims of a violent act at work: A longitudinal study. *Psychological trauma: theory, research, practice, and policy, 12*(3), 313.
- Walter, D. L. (2017). The relationship of quality of work-life and organisational commitment: A correlational study of flight attendants in the United States (Doctoral dissertation, Grand Canyon University).
- Walton, R. (1980). Quality of work life activities: A research agenda. *Professional Psychology*, 11(3), 484.
- Watson, I., Buchanan, J., Campbell, I., & Briggs, C. (2003). *Fragmented futures: New challenges in working life (No. 7)*. Sydney: Federation Press.
- Zahedi, M., Akhavan, P., & Naghdi Khanachah, S. (2020). Identifying the key barriers to knowledge management and lessons learned in the project-based military organisations. *MILITARY MANAGEMENT QUARTERLY*, 19(76), 29-68.
- Zahedi, M. R., & Khanachah, S. N. (2019). The impact of customer assisted knowledge production capacity on customer capital in a knowledge-based center. *Annals of Management and Organization Research*, 1(2), 107-121.

- Zahedi, M. R., & Khanachah, S. N. (2020). The effect of knowledge management processes on organisational innovation through intellectual capital development in Iranian industrial organisations. *Journal of Science and Technology Policy Management*.
- Zahedi, M. R., & Naghdi Khanachah, S. (2020). Designing and implementing a model of organisational readiness assessment to become a knowledge-based organisation: Case study an Iranian research center.